[Designation of Document] Specification

[Title of the Invention] POSITIVE RESIST COMPOSITION

[Claims]

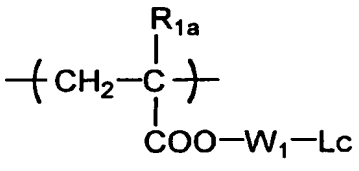
1. A positive resist composition, comprising:

(A) a resin containing at least one kind of acrylate derivative repeating units, having a glass transition temperature in the range of 70 to 150°C and capable of increasing its solubility in an alkali developer under action of an acid, said resin having repeating units of at least one kind selected from repeating units represented by the following formula (IV) or repeating units having groups represented by the following formula (V-1), (V-2), (V-3) or (V-4), and repeating units represented by the following formula (AII),

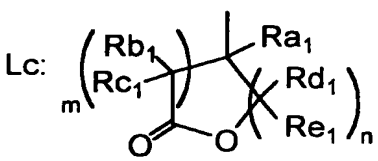
(B) a compound capable of generating an acid upon irradiation with an actinic ray or radiation, and

(C) a mixed solvent containing at least one solvent selected from a propylene glycol monoalkyl ether carboxylate, an alkyl lactate or a linear ketone, and a cyclic ketone;

[Ka-1]

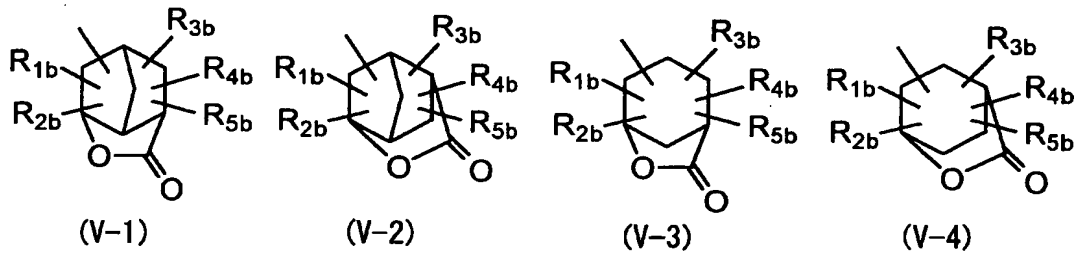


(IV)



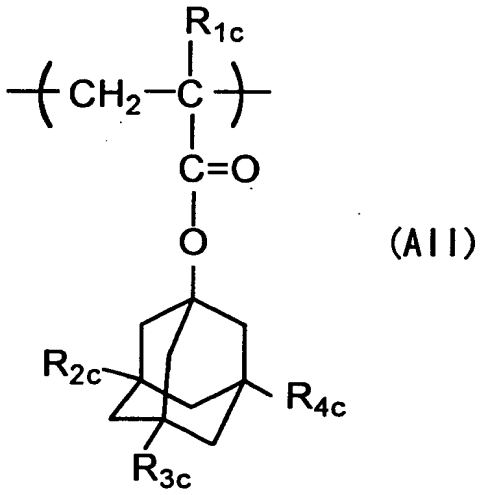
wherein R_{1a} represents a hydrogen atom or a methyl group, W_1 represents a divalent single group or a combination of at least two divalent groups selected from the class consisting of a single bond, an alkylene group, an ether group, a thioether group, a carbonyl group and an ester group, R_{a1}, R_{b1}, R_{c1}, R_{d1} and R_{e1} each represent a hydrogen atom or a 1-4C alkyl group independently, and m and n each represent an integer of 0 to 3 independently, provided that m+n is from 2 to 6;

[Ka-2]



wherein R_{1b} to R_{5b} each represent a hydrogen atom, an alkyl group, a cycloalkyl group or an alkenyl group independently, or any two of them combine with each other to form a ring;

[Ka-3]



(AII)

wherein R_{1c} represents a hydrogen atom or a methyl group, R_{2c} to R_{4c} each represent a hydrogen atom or a hydroxyl group independently, provided that at least one of R_{2c} to R_{4c} represents a hydroxyl group.

2. A resist composition as described in claim 1, wherein 10 to 90 mole % of the repeating units constituting the resin (A) are derived from acrylate monomers.

3. A resist composition as described in claim 1, wherein 50 to 75 mole % of the repeating units constituting the resin (A) are derived from acrylate monomers.

4. A resist composition as described in any of claims 1 to 3, wherein the compound (B) is a triphenylsulfonium salt.

5. A resist composition as described in any of